Journal of the Lepidopterists' Society
47(4), 1993, 328

VERIFICATION OF THE OCCURRENCE OF *LOTISMA TRIGONANA* (COPROMORPHIDAE) IN ALASKA

Additional key words: British Columbia, Ericaceae, *Vaccinium*.

Lotisma trigonana (Walsingham) is thought to occur along the Pacific Coast of North America from Alaska to Costa Rica (Heppner 1986). The northern distribution of *L. trigonana* is based on abundant specimens from coastal Canada and one specimen from Alaska. Heppner (1986) reported 89 specimens of *L. trigonana* collected from 11 sites in British Columbia, Canada between 1899 and 1956, the most northern of which is Vancouver (49°15'N, 123°08'W). The existence of *L. trigonana* north of Vancouver is based on a single specimen labeled Orca, Alaska (60°39'N, 145°43'W), collected on the Harriman Alaska Expedition of 1899. Heppner speculated that Orca, as listed on the pinning label, may actually refer to the Orcas Islands of Puget Sound, Washington, where the Harriman Expedition may have started collecting specimens. Given the existence of only a single specimen in Alaska, and the possibility of a labeling error of that specimen, additional specimens from Alaska would greatly strengthen the conclusion that the range of *L. trigonana* extends through coastal Alaska.

We can verify the occurrence of *Lotisma trigonana* in and around Juneau, Alaska (58°18'N, 134°24'W). In August 1991, Gaither collected over 1000 berries of *Vaccinium* spp. (Ericaceae) from two locations along the Juneau road system. Many of these berries were infested with larval Lepidoptera. The berries were placed in plastic cups modified into rearing chambers. The cups had holes for drainage, a layer of sphagnum moss on the bottom, a wire mesh screen midway up the cup, and a nylon screen over the top of the cup. Berries rested on the wire mesh screen. In September and early October 1991 larvae emerged from the berries and entered pupation within the rearing cups. The pupae overwintered in the cups which were placed in outdoor covered cages. Over 100 adults emerged in April and May of 1992. De Benedictis examined adult specimens of both sexes and identified them as *Lotisma trigonana* (Walsingham).

The information presented here is the result of Gaither's dissertation research on the interactions between fruit-bearing plants and fruit-infesting insects. The research is ongoing and at present encompasses three summer field seasons. Future publications will present additional information on host plants and life history.

Voucher specimens are deposited in the Bohart Museum, Entomology Department, University of California, Davis, California. Roy A. Mask and Paul E. Hennon, both at Forest Health Management, Alaska Region, U.S.D.A. Forest Service, provided valuable advice and materials in our work. Mary F. Willson, Forestry Sciences Laboratory, U.S.D.A. Forest Service, provided generous logistic support.

Literature Cited

Heppner, J. B. 1986. Revision of the New World Genus *Lotisma* (Lepidoptera: Copromorphidae). Pan-Pacif. Entomol. 62:273–288.

James C. Gaither, Jr., *Section of Botany, University of California, Davis, California 95616;* and John De Benedictis, *Department of Entomology, University of California, Davis, California 95616.*

Received for publication 15 February 1993; accepted 20 April 1993.